OVERTRAINING: TOO MUCH OF A GOOD THING?

KNOWLEDGE

VOL 5 MAY 2011

OFFICIAL SAFETY MAGAZINE OF THE U.S. ARMY

GEAR UP AND RIDE

- BICYCLE SAFETY
- KNOW YOUR WINDS
- TROUBLE-FREE TRIPS

+ A SIMPLE MISSION

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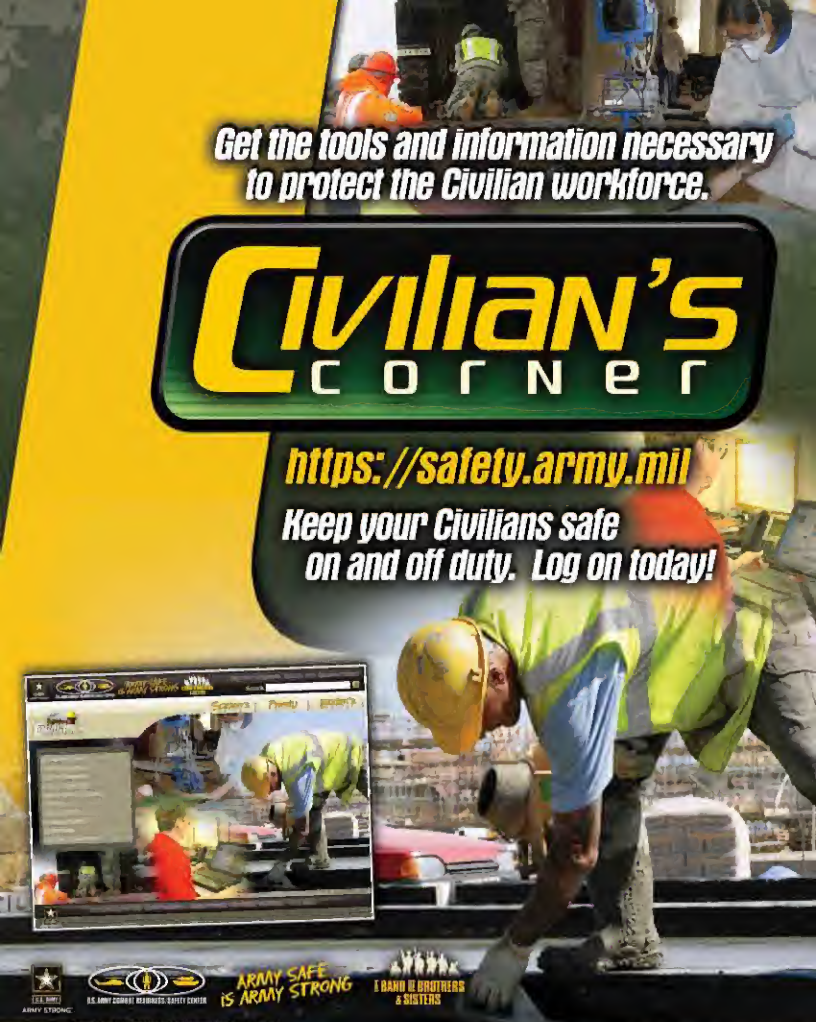
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CIVILIANS FAMILIES

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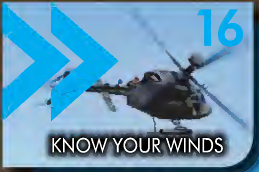

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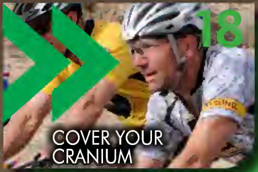

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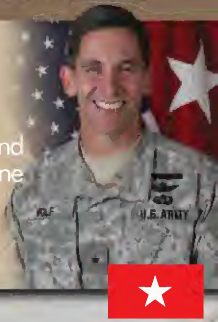
STAYING SAFE ON THE ROAD

Look anywhere in the United States, and one of the surest signs of spring and summer is the abundance of motorcycles on streets and highways. It's no different in our Army — as the temperature rises, so does the number of sport bikes, cruisers and everything in between on our installations. This time of year is a favorite for riding enthusiasts, and we want to kick it off safely by supporting the National Highway Traffic Safety Administration's observation of Motorcycle Safety Awareness Month.

As an Army, we've made great strides in identifying motorcycle riders and providing them with training that has proven time and again to save lives. Riding shouldn't be an underground activity, and the increasing number of registered motorcycles on posts shows most Soldiers recognize the value of our current safety requirements and initiatives like Motorcycle Mentorship Programs. Yet, every year we lose far too many Soldiers to accidents involving indiscipline on motorcycles, whether it's a lack of proper training, excessive speeding, neglecting to wear even the most basic personal protective equipment or drinking while riding.

Historical analysis shows us that motorcycle riders are 10 times more likely to become involved in a Class A-C accident than sedan operators. Just as alarming is the ongoing trend of Leaders at the rank of sergeant and above being fatally injured on their bikes. As of mid-March, Leaders accounted for 10 of the 13 motorcycle deaths reported Army-wide for fiscal 2011. Leaders are responsible for both setting and enforcing the standard, and the challenge for our Army continues to be reaching these battle-hardened Soldiers on the importance of their personal accountability.

We place a great deal of emphasis on engagement in Soldier safety, but Leaders need engagement from their chain of command as well. Taking care of Soldiers is a tremendous job, and Leaders at all levels need support from their peers and superiors to do it effectively. However, we must remember rank



> “**ENGAGEMENT** is a two-way street and requires constant **INTERACTION** between **SOLDIERS** and **LEADERS**, with everyone **LOOKING OUT** for and **LEARNING** from one another.”

does not exempt a Leader from wearing a helmet, following the speed limit or calling a cab when he or she has had too much to drink.

Neither does rank matter in engaging with high-risk Soldiers. Someone always knows when a Soldier, whether a subordinate or superior, is taking unnecessary risks on or off duty. Junior Soldiers should play a key role in keeping their Leaders safe, and we should allow them to freely express their concerns on potentially hazardous situations. Engagement is a two-way street and requires constant interaction between Soldiers and Leaders, with everyone looking out for and learning from one another.

Moving forward into the height of riding season, ensure all your Soldier riders — Leader and junior alike — are engaged and understand both the joys and hazards of motorcycle ownership. Training, education and PPE all go a long way toward keeping riders safe on the road, but there's no substitute for knowing your Leaders and Soldiers are counting on you to make it back safe.

While we'll see more motorcycles on the road during summer than any other season, privately owned vehicles still outnumber bikes by the thousands. Incidents involving POVs remain the top accidental killer of Soldiers every year, and the months between April and September are the peak season for fatal POV accidents. As with motorcycles, speeding, drinking and driving and failure to wear protective equipment — in this case, seat belts — are the causes most often cited in fatality reports. Remember to engage with your Soldiers on making safety a priority in all their summer travels, whether it's for fun in the local area, a beach a few hours away or visits to Family and friends many hundreds of miles from post.

Be sure to check out the tools available on the USACR/Safety Center website, https://safety.army.mil, for information and media products on riding, driving and summer safety. The annual Safe Spring/Summer Campaign was released live in April and includes posters, videos and articles designed to educate Soldiers on hazards associated with summer activities. We also recently consolidated all driving topics in one central location on our website, https://safety.army.mil/povmotorcyclesafety, with individual tabs for POV, motorcycle and recreational vehicle information and tools. Now users can easily retrieve guidance on specific topics and stay up-to-date on the latest safety news with just a couple of clicks. Let us know how the new tab works for you.

As always, thank you for the hard work you do every day to keep our Soldiers, Family members and Civilians safe. Play hard this summer, but remember to always play it safe!«

Army Safe is Army Strong!

WILLIAM T. WOLF
Brigadier General, USA
Director of Army Safety

The mission was simple. An OH-58C had made a precautionary landing on the range and needed a part flown out. It would take about 30 minutes to replace the part and then the aircraft could be signed off and flown back home.

A SIMPLE MISSI

Chief Warrant Officer 3 Jason Merrill (a fictitious name) was tasked to perform the single-pilot support mission. He was told to take along a technical inspector (TI) and a crew chief to perform the work and then return to base in the repaired aircraft.

Merrill did the normal things — preflight, weather check and mission planning. The mission brief was simple; after all, it was a simple mission. He knew the range by heart — every landing zone (LZ), road and checkpoint. Navigating was a cinch; he wouldn't have to rely on a map. Of course, he'd take it along with all the other required publications. He believed in doing things by the book.

The only thing that bugged Merrill was the weather. He didn't like flying single pilot at night. Ever since he had gotten used to night vision goggles (NVG), night unaided had lost its luster. Besides, quite honestly, he hadn't flown unaided in a good while. This was the "Cav," where night flights meant goggle flights. He looked at the weather information closely. The sky was clear, the moon would be up and visibility unrestricted. As he prepared a local flight plan, he thought about the fact that this was the fall — hot in the day and cool at night. Ground fog was coming fast on the range.

"Oh, well," he thought. "I know that range like the back of my hand — every creek, every lake where the fog likes to hide." Besides, he would be returning early, before the fog began to settle over the low areas.

The flight to the downed aircraft was uneventful. After shutting down, the TI and crew chief went to work. Merrill talked with the aircraft's two aviators, kidding the pilot in command (PC) about causing him to miss getting home early and having supper with his family.

"I should have let you stay out here — good survival training," he joked.

The work took longer than expected, but, about an hour later, it was time to head for the barn. At first, the pilots of the now-repaired OH-58 suggested Merrill follow them back. However, as they discussed the idea, they realized they hadn't been briefed for formation flying and decided it wasn't a good idea.

Merrill told the other crew to take off first. He would wait a few minutes and then follow. After all, they were going in the same direction. As long as they were not in formation, it shouldn't be a problem. Everyone agreed.

On the flight home, both aircraft kept their distance but maintained

ON

JOHN H. STRICKLAND
Headquarters, U.S. Army Reserve Center
Fort McPherson, Ga.

internal FM radio communications. Merrill kept the lead aircraft's position lights in sight as they exited the range.

Except for the fact they had been delayed almost 90 minutes, everything was going smoothly. It was simple to follow the route back — mostly range roads — but patches of ground fog were beginning to show in low areas.

About five minutes from home, things began to go wrong. The fog got worse, and Merrill lost sight of the lead aircraft. One call assured him they were OK and had the airfield in sight.

Suddenly, the fog thickened. Merrill told the TI, who was in the left seat, to let him know if he began to lose sight of the ground. The pilot slowed the aircraft a little but decided to maintain altitude.

Should he turn around? He could still see the ground and the PC of the lead aircraft had just flown through the weather without any problems. Merrill knew they had followed the same route and were no more than a kilometer ahead.

When Merrill was almost to the exit point where he would change frequency from range control to the airfield tower, he looked to his right. The terrain was mostly open fields, which, at night, looked like a black hole.

Suddenly, engulfed in fog, the crew rapidly lost all visual contact with the ground. How deep was this fog? How high was it? Was it a simple scud layer? Single pilot at night on instruments? Should he climb? Descend? Do a 180? That didn't sound smart. Neither did the idea of flying in this soup.

The TI saw a "sucker hole" and said, "Your left, sir."

Merrill immediately turned left, descended through the hole, leveled off and looked for an open field. He knew there was a field somewhere to his left off the range road. Below there were trees and more trees, and it was getting difficult to maintain visual reference. Then, straight ahead, he saw the field he had been searching for. Before landing, Merrill made a quick call to unit ops to inform them he was landing and shutting down. They could come get him — he didn't intend to fly back tonight.

As Merrill and his crew sat by the fire they'd built in the field where they'd landed, the fog continued to roll in. He looked at his TI and crew chief and realized he could have killed these young Soldiers. Merrill realized his poor choices not only could have killed himself but, also, his buddies.

What had seemed like a simple mission had turned into a close call — brief seconds of fear and high-risk decisions.

This is a true story. I know because it happened to me about 25 years ago. I am "Merrill."

Never Underestimate Those Simple Missions

Much can be said of how safety programs and improved aviation technology have reduced risk and significantly lowered our overall accident rates. However, regardless of that progress, we aviators are still the same human beings who flew the first biplane. Though more knowledgeable, we are still capable of making the same errors we've always made.

We have been successful at standardizing our equipment, and technology has allowed us to improve equipment across the board. As human beings, however, we have to improve one at a time. That is the reason standardization is critical. It allows us to train each aviator to a particular level and standard.

What went wrong on this night was that the humans involved were not adhering strictly to standards. I had completed the risk assessment sheet with all the right numbers and it had come out "low risk" — nice if everything goes perfect, which it seldom does.

I had not flown unaided in quite a long time, and it's not the same as flying NVG. I knew that, but I wasn't going to turn down a mission because of it. I didn't consider it to be a serious factor. In addition, we fudged on the formation flight. Sure, we were legal, but we weren't very smart. My intentions were to keep the other aircraft in sight — we would "unofficially" flight follow each other. What I did not know was that the other crew was flying NVG, and that's why they had fewer problems than I did. Of course, since we were not "flying formation," there had been no need to brief, so critical information was never shared.

Last, but hardly least, was the weather. The risk level changed when the timeline changed — the weather was changing even as we were discussing our takeoff. And my decision-making process left out still another critical fact as we droned along that night: the other aircraft was a kilometer ahead, and that made a difference.

The only weather you should trust absolutely is what you are seeing out your cockpit window. That night, the weather was saying, "Land!" I hesitated almost 30 seconds too long, and that could have cost my life and the lives of my crew. The ability to learn from your own mistakes is a blessing, not a given. I was allowed to learn from my experience.

It's not our equipment or the environment that causes most of our accidents. Machines and environment are fairly predictable. We can plan on these with acceptable accuracy. Human beings are not quite as predictable; they make decisions that lead to accidents. It's not too difficult to determine what they did wrong, but determining why is more challenging.

Lessons Learned

From this event, I learned what I call my Top 10 "why" lessons.

1. Most "extremely high" risks are self-imposed. Actions we take in flight or on the ground usually are influenced by personal motivation or unplanned responses to a situation. Whether it is desire to complete the mission, ego or simply not thinking the consequences through, the result can be catastrophic.

2. The response to accepting "high" risk is influenced more by actual outcome than by possible outcome. If we gamble and succeed, we are more apt to see it as a good decision than a bad one. Too many times we insist on learning our lessons from accidents rather than close calls. Both can teach the same lesson.

3. It's better to have a damaged ego than a damaged aircraft or body. Many times, we go that extra 30 seconds simply because we cannot or will not admit we've exceeded our capability or made a mistake or bad decision. That leads us to make an even greater mistake or worse decision.

4. Every aviator will be faced at least once in his or her life with making a decision in which

the outcome can mean the difference between an accident, a close call or a good no-go choice.

5. Aircrew coordination must involve effective communication and teamwork. One thing I remember most is the silence between the TI and me during our flight. I never communicated my concerns to him (or him to me) about continuing to fly that night as visibility grew worse. He was ready to land and get out several minutes before we ultimately did. The crew of the other aircraft never communicated to me that they were flying NVG. Two highly skilled pilots do not automatically equal good aircrew coordination.

6. Making a critical decision based on a self-imposed emergency is seldom done without hesitation. The same professional pilot who will instantly respond to an emergency, such as an engine failure, may hesitate to abort a mission because of fatigue, bad weather, poor forward-looking infrared radar conditions or a simple personal conflict with another crewmember. We don't react as quickly to internal warnings as external ones.

7. Risk management during every phase of mission planning reduces unpredictable "human" actions. We reduce risk by reducing unpredictable actions. Accident-causing errors usually result from individuals' unplanned actions, and unplanned actions are usually due to unidentified risk.

8. We must seek to anticipate and eliminate every risk. Every aviator must be prepared to identify risk and work the process through to completion. Don't accept unnecessary risk, no matter what phase of the mission you're in.

9. There are no simple missions. The more we identify and eliminate risk, the greater our opportunity for success.

10. Every flight should start and end with standardization. Human beings are the most complicated of the man-machine-environment mix. There is no substitute for training to standards and enforcing those standards. Ignoring standards will cause accidents.

Summary

My Top 10 "why" lessons are not all-inclusive. When it comes to safety, nothing is. Accidents do not just happen; they are caused. The goal of every individual in the unit should be to ensure that nothing he or she does will cause an accident. And, because you may not get the chance to learn from your own mistakes, take every opportunity to learn from someone else's.«

TOO MUCH OF A GOOD THIN

LISA YOUNG
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It is an accepted fact that exercise is essential for a healthy body and mind. But is it possible to get too much exercise? Actually, it is. When a person pushes their body too hard or too long without giving it a chance to recover with adequate time, rest and nutrition, the result can be overtraining.

Overtraining can occur with aerobic exercises such as running, biking or swimming and with resistance exercises such as weightlifting. This condition occurs when either exercise volume or intensity exceeds what a person should be doing for an extended period of time. Training volume can be excessive if more exercises are added, additional repetitions or sets are performed or the frequency of the exercise is increased for too long. In contrast, overtraining due to excessive intensity occurs when too heavy a resistance is used for an extended time. These principles apply to elite athletes as well as to individuals who exercise for general health and fitness.

So how does a person know when they are overtraining? Regular exercise and physical training are healthy habits that should make a person feel better, not worse. People experiencing the signs and symptoms of overtraining may be pushing themselves too hard. It is important to understand that not all of the signs and symptoms of overtraining may be present, and just because some are present does not necessarily mean a person is overtraining. The true test is whether performance is impaired or plateaued.

According to the American College of Sports Medicine, some frequent signs of overtraining include:

- Decreased performance in strength, power, muscle endurance or cardiovascular endurance
- Decreased training tolerance and increased recovery requirements
- Decreased coordination, reaction time or speed
- Altered resting heart rate, blood pressure and respiration patterns
- Increased basal metabolic rate
- Chronic fatigue
- Sleep disorders
- Decreased appetite and weight loss
- Menstrual disruption
- Headaches or gastrointestinal distress
- Muscle, joint and tendon aches and stiffness
- Longer healing times and more frequent illness

So what should a person do if they have been overtraining? There are several simple steps to alleviate and correct this condition, including:

- Add one or more recovery days to each training week.
- Include periodized exercise programs, which gradually alter the training variables over time to allow the body to progress in stages and recover adequately.

FYI

For more information about physical activity and exercise guidelines, visit the Centers for Disease Control and Prevention website at http://www.cdc.gov/physicalactivity/everyone/guidelines/index.html and the American College of Sports Medicine at http://www.acsm.org/.

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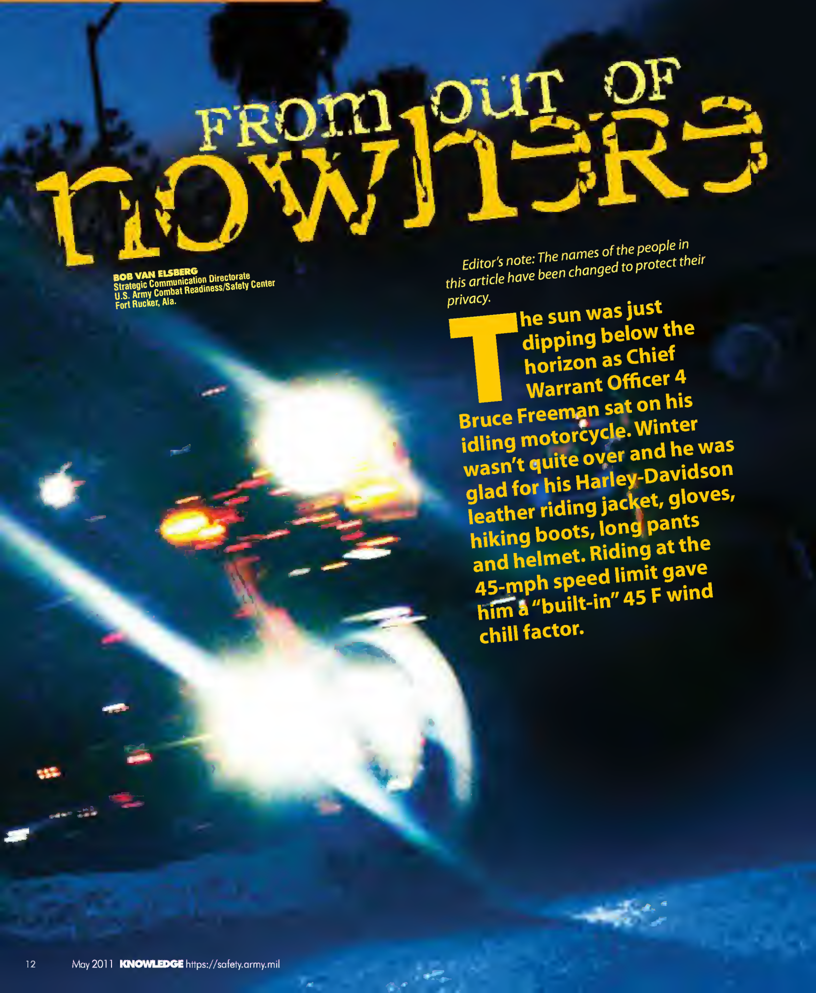
- Ensure that training volume and exercise intensity are inversely related.
- Avoid monotonous exercise by increasing training variety.
- Avoid doing too high a number of exercises, sets and/or repetitions.
- Avoid performing every set of every exercise of every session to absolute failure (for resistance training).
- Take into account the cumulative training effect of different kinds of exercise.

Exercise is a health habit that has many advantages. Be sure that your exercise program includes regular periods of recovery and that you reassess and adjust your training often. Done properly, exercise can bring life-long benefit to the body and mind.«



FROM OUT OF NOWHERE

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Editor's note: The names of the people in this article have been changed to protect their privacy.

The sun was just dipping below the horizon as Chief Warrant Officer 4 Bruce Freeman sat on his idling motorcycle. Winter wasn't quite over and he was glad for his Harley-Davidson leather riding jacket, gloves, hiking boots, long pants and helmet. Riding at the 45-mph speed limit gave him a "built-in" 45 F wind chill factor.

Finally, the light turned green and he eased out the clutch. His 2008 Harley-Davidson Street Glide began rolling across the intersection of Fort Campbell Boulevard and Ringgold Street as he rode in the road's far-left lane. Glancing in his right-side rearview mirror, he saw a large service truck in the middle lane slowly gathering speed as they both traveled southbound. On his left, Freeman could see the faces of the drivers stopped in the oncoming turn lane. It was as it had always been — a routine ride on a familiar section of road. Soon he would be joining his wife and nine of their friends at a local restaurant.

Behind the wheel of the service truck, Jimmy Laughlin paid attention to the rider now slightly ahead and in the lane to his left. He'd followed behind Freeman for a couple of miles and then moved to the middle southbound lane. Himself a rider, Laughlin noted a number of motorists pulled into the street, cutting off Freeman in his lane. Laughlin had moved into the middle lane to avoid hitting Freeman should something happen in the road ahead. And something was definitely about to happen.

Cheryl Banks was in a hurry to turn onto Eva Drive, which intersected Fort Campbell Boulevard from the southbound lanes. Cutting across all three northbound lanes of traffic, she shot sideways into the median. If she could just get a break in the southbound traffic, she could hurry straight across the road and onto Eva Drive. But, sitting sideways to the other vehicles in the median, her view of approaching southbound traffic was obscured. Craning her head, she peered through the windshield of the vehicle stopped to her right in the median. She could see Laughlin's truck but not Freeman, who was fast approaching in the lane nearest her. Seeing her chance to beat Laughlin across the road, she hit the gas. But she hit much more than the gas — she nailed Freeman, T-boning him and his motorcycle.

Laughlin saw it all. He saw Banks' vehicle suddenly come from out of nowhere, dart into the lane and smash into the motorcycle. He watched in shock as Freeman twisted and spun some 40 feet through the air, landing in the right-hand lane and then tumbling and slamming head-first into the curb.

Hitting his brakes, Laughlin pulled into the right-hand lane and stopped, using his truck to shield Freeman from following traffic. Stepping out of his cab, he called 911 on his cell phone and ran toward the downed rider. As he bent down to check him, Laughlin found Freeman was face down, his right arm twisted and broken behind his back. Laughlin believed he'd just watched a man die.

A woman who said she was a nurse ran from the line of stopped cars, followed by two men claiming they had paramedic experience. The woman gently held Freeman's head as the men carefully moved him onto his back. Looking at Freeman's face, Laughlin saw his eyes were open, but he was unresponsive. Gurgling sounds punctuated Freeman's erratic breaths, evidence a rib had punctured one of his lungs.

Laughlin looked at his watch. The minutes ticked by; first five, then 10

> “‘Had I been wearing a **‘COOL GUY’** novelty helmet that I bought at some rally, I **WOULD NOT BE HERE TODAY**.’”

and then 15 — but still no ambulance. Frustrated, he dialed 911 again, demanding the ambulance hurry. Freeman looked bad — there was no time left for delays.

Freeman's wife, Linda, looked at her watch as she waited at the restaurant and wondered where her husband was. She and their friends were unaccustomed to his being late. "Where is he?" she asked herself.

Laughlin saw the ambulance's flashing lights as it approached the crash scene. Emergency medical technicians jumped out and quickly got to Freeman, intubating him to help him breath and then stabilizing and gently loading him into the ambulance. The trip would be a short one — just far enough to reach an area where a helicopter could land. The rotor wash pounded down against Freeman and the EMTs as they loaded him onto the aircraft. Moments later it lifted off and headed toward Vanderbilt Hospital in Nashville, Tenn. Upon arriving, doctors immediately moved him into the Level 1 traumatic care unit. Freeman's wife had been called and was on her way to join him. But the roughly 50-mile drive on Interstate 24 East seemed to take forever.

"I was nervous … all I cared about was, 'Is he alive, is he alive?' I didn't care if he lost a toe or an arm; I didn't care about any of that. All I cared about was his being alive," she said.

Doctors found the impact with the car had badly injured Freeman's left leg and foot, breaking all of his toes and leaving a nasty gash in his leg. His impact with the road broke both shoulders, damaged 10 vertebrae and broke seven ribs — one puncturing a lung. He'd also badly broken his right wrist. Altogether, he had 24 broken bones. What most concerned the doctors was the damage to his brain. As they looked at the images, they found evidence of shearing in his left and right frontal lobes and left temporal lobe — indications his brain had slammed against the inside of his skull. While he'd survived, his short-term memory was severely damaged. When he awakened five days later from a medically induced coma, he couldn't name the president of the United States. Over time, therapists worked with him, helping him remember short phrases and lists of numbers to rebuild his short-term memory skills.

Freeman spent nearly a month at the hospital and a nearby rehabilitation facility and ultimately returned to his unit. More than anything, as a pilot, he yearns to get back into the cockpit. He is undergoing a year of observation to ensure he's free of any problems. His hopes of flying again and surviving to enjoy his wife and friends reflect his wisdom in wearing a "real" helmet, one approved by the Department of Transportation. He knows the value of that only too well.

"Had I been wearing a 'cool guy' novelty helmet that I bought at some rally, I would not be here today," Freeman said.

His other protective gear also helped. His leather riding jacket prevented road rash to his arms, stomach or back. His boots helped stabilize his damaged left foot until he got to the hospital and received medical treatment. Although his long pants were Levi's — not the most durable fabric when sliding down the road — they did help limit the road rash to his legs. Being protected while riding is important, he said, because riders can never completely predict what others will do on the road. He explained these items of safety gear are "meant to lessen the dangers out there just waiting to gobble you up."

As a Soldier, surviving his horrific accident has meant the world to him.

"I'd hate to think that I was robbed of the opportunity to serve my country and do what I love to do," he said. «

Family strong!

Army Safe is Army Strong and that starts with a Soldier's Family. Have the information to help you and your Family stay safe.

Family engagement kit

https://safety.army.mil

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THE BAND OF BROTHERS & SISTERS

"Where are the winds from?" Every aviator, from the "newbie" (RL3 guy) to the senior wings pilot, has asked this question. Knowing your winds is a fundamental part of flying, particularly in Afghanistan, where the need for helicopter support has increased in recent years.

The mountainous terrain in Afghanistan is challenging, causing turbulence, down drafts and wind patterns that are often hard to predict. Army aviators must be confident in their ability to conduct aviation operations at high altitude, where aircraft performance and power available can be severely limited. Actually, understanding the concepts and applying them to day-to-day missions is the challenge that can often determine whether you crash or stay in the air.

To meet the high demand for aviation assets to support the ground commanders, the Army has incorporated high-altitude training at the U.S. Army Aviation National Guard High-Altitude Army Aviation Training Site and the High-Altitude Mountainous Environmental Training Strategy. Both training centers are located in Colorado.

During the relief-in-place process and progression flights in Operation Enduring Freedom, aviation task forces put a heavy emphasis on high-altitude training. Every aviator was required to conduct approaches during day and night vision goggle conditions, incorporating wind direction identifiers, wind circles, power management, maintaining an "out" and other fundamentals. Fortunately for us, our standardization pilots and instructor pilots (IP) taught us very well, choosing challenging terrain and conditions to demonstrate these principles. I found this training beneficial, as I was one of the low-time aviators in our task force. Our IPs and senior pilots-in-command continually discussed the fundamentals in daily flights and practiced them after executing the mission. Most everyone was humble enough to listen.

These concepts habitually paid off for us, allowing us to complete our missions; however, one instance particularly stands out. While conducting area security for a dismounted patrol, the ground forces identified a possible point-of-origin site from a previous engagement. The site was about 1.5 kilometers inside of a tight valley that generally led uphill. Our OH-58 crew first started with a high recon of the area to develop the situation and identify where we needed to look. Even in the excitement of finding bad guys, we also noticed indications of where the wind was blowing within the valley. Varying

KNOW YOUR WINDS

NAME WITHHELD BY REQUEST

our flight patterns, we continued to get closer, down to about 50 feet, eventually identifying a possible insurgent at the site. We maintained contact and the ground forces eventually detained the individual. Throughout our reconnaissance, we continued to talk and crosscheck in the cockpit about our airspeed, altitude and possible "outs" while maneuvering in the tight valley. The training and practical applications we learned early on helped us complete our mission, safely maneuver the aircraft and, ultimately, support ground efforts.

> "The bottom-line **LESSONS** I learned from these two experiences are to **KNOW YOUR WINDS** and **CONTINUE** to **PRACTICE** the fundamentals you've **LEARNED.**"

In another instance later in the deployment, we weren't quite as lucky. Conducting area reconnaissance in another wide valley, we spotted several armed males along a known insurgent trafficking route. To maintain contact rapidly, I conducted a sharp, stalling turn to the left. What I didn't take into consideration was my current altitude, airspeed and wind direction. I turned, with little airspeed, into a tailwind. Suddenly, maintaining contact quickly became my second priority as I tried to arrest our rapid descent with the cyclic and forward airspeed and, eventually, with power from the collective. Luckily, I was able to get out of the settling condition with only my pride hurt, although we only missed a transmission overtorque by 1 percent. In addition, we lost contact with the armed males, who quickly hid in mountainside caves and huts. My complacency and overconfidence caused us to lose the targets and nearly damage the aircraft.

The bottom-line lessons I learned from these two experiences are to know your winds and continue to practice the fundamentals you've learned. Army aviators must understand the aerodynamics and atmospheric effects on their aircraft at high altitudes. It is your responsibility to learn, understand and apply these training concepts. The Department of the Army Leaders and senior aviators will be there to teach and quiz your knowledge, but the responsibility ultimately falls on you. The worldwide high demand for rotary support in conflicts like Afghanistan means that aviation has a higher responsibility to support the ground forces. Knowing the winds could ultimately determine mission failure or accomplishment — whether you end up crashing or flying away.«

COVER YOUR CRAN

STEVE RAMKE
Bayne-Jones Army Community Hospital
Fort Polk, La.

"I have to wear what?" That's what I said the first time I was told I had to wear a bicycle helmet while riding off duty.

I complained to my commander, first sergeant and anyone else who would listen. I even questioned the commander about the new requirement written into regulations that required me to wear a helmet. After all, I had been riding a bike since I was 6 years old. Now in my 30s, I was invincible and nothing was going to happen to me while riding my bike.

Well, my complaining fell on deaf ears. Like a good sergeant, I complied with orders. I bought helmets for my family and myself, and I begrudgingly started wearing mine when I rode. Little did I know that just a few months later that helmet would keep me from suffering a serious head injury.

It was a nice day in Abilene, Texas. The wind was calm, the sun was shining and I didn't have to report for duty until 4 p.m. for the swing shift. I decided to do a little extra PT that day, and a good bike ride seemed to be just the ticket. I checked the air in my tires, grabbed my helmet and hit the road. I was nearing the end of my ride when it happened.

First, I heard a pop. Next thing I knew, I was on my back and my head slammed onto the asphalt. My vision quickly dimmed, but I was brought back to my senses when my bicycle crashed back down upon my chest and face. What happened? Was I OK? Did I break anything? As I lay in the road asking myself those questions, I realized I should probably move before I got run over by a car.

Wow, my head hurt!

IUM

Getting up slowly, I looked for what caused me to take a spill. As I inspected my bike, I discovered that metal fatigue in my left pedal caused it to snap off. When that happened, I rolled off my bike while traveling at a pretty decent speed. What I thought would never happen to me actually did.

Brushing myself off, I removed my helmet. That's when I realized how lucky I was to be wearing it. The back of my helmet literally slammed into the asphalt. I had three 4-inch cracks in the back of the helmet and one 3-inch crack in the side of it. I can only imagine the damage my head would have sustained had I not been wearing

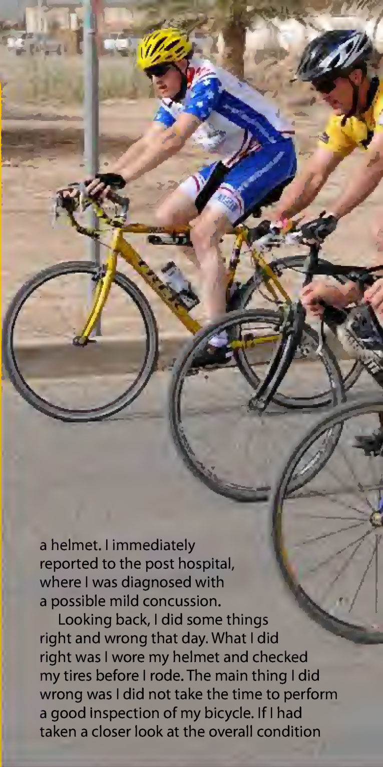
FYI

May is National Bike Month. The League of American Bicyclists is promoting Bike-to-Work Week 2011 from May 16-20 and Bike-to-Work Day Friday, May 20.

RULING THE ROAD

Wearing a properly fitted helmet isn't the only precaution bicyclists should take when riding. Before hitting the road on your bike, keep in mind the following safety tips from the National Highway Traffic Safety Association.

- **See and Be Seen.** No matter the time of day, you need to be seen by others. Wearing white has not been shown to make you more visible. Rather, always wear neon, fluorescent or other bright colors when riding day or night. Also wear something that reflects light, such as reflective tape or markings, or flashing lights. Remember, just because you can see a driver doesn't mean the driver can see you.
- **Go with the Flow.** Ride on the right in the same direction as other vehicles. Go with the traffic flow — not against it.
- **Obey All Traffic Laws.** A bicycle is a vehicle and you're the driver. When you ride in the street, obey all traffic signs, signals and lane markings.
- **Yield to Traffic When Appropriate.** Almost always, riders on a smaller road must yield for traffic on a major or larger road. If there is no stop sign or traffic signal and you are coming from a smaller roadway (out of a driveway, from a sidewalk, a bike path, etc.), you must slow down and look to see if the way is clear before proceeding. This also means yielding to pedestrians who have already entered a crosswalk.
- **Be Predictable.** Ride in a straight line, not in and out of cars. Signal your moves to others.
- **Stay Alert at All Times.** Use your eyes and ears. Watch out for potholes, cracks, wet leaves, storm grates, railroad tracks or anything that could make you lose control of your bike. You need your ears to hear traffic and avoid dangerous situations, so don't wear a headset when you ride.
- **Look Before Turning.** When turning left or right, always look behind you for a break in traffic and then signal well before making the turn. Watch for left- or right-turning traffic.
- **Watch for Parked Cars.** Ride far enough out from the curb to avoid the unexpected from parked cars such as doors opening or cars pulling out.



a helmet. I immediately reported to the post hospital, where I was diagnosed with a possible mild concussion.

Looking back, I did some things right and wrong that day. What I did right was I wore my helmet and checked my tires before I rode. The main thing I did wrong was I did not take the time to perform a good inspection of my bicycle. If I had taken a closer look at the overall condition

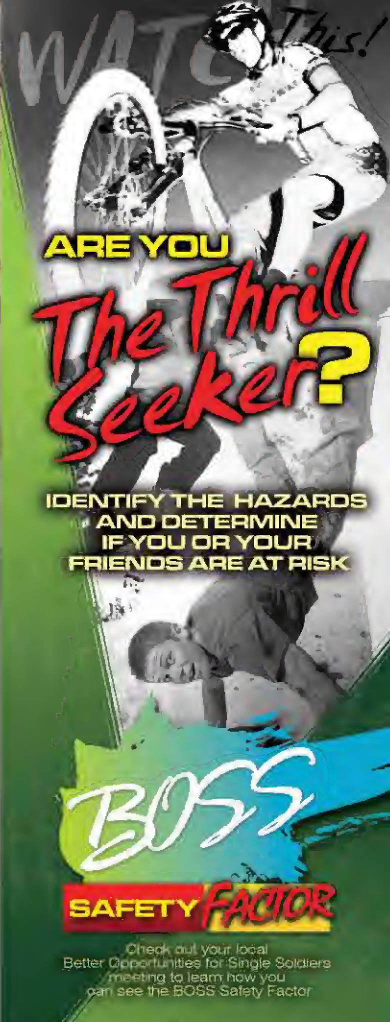
DID YOU KNOW?

According to Army Regulation 385-10, when bicycling on Department of Defense installation roadways during hours of darkness or reduced visibility, bicycles will be equipped with operable head and

of my bike, I may have caught the fault in the pedal and prevented the pain I suffered.

So, I have to wear what? A bike helmet, that's what! And believe me; I'll never complain about it again.«

taillights, and the bicyclist will wear a reflective upper outer garment. For more information about bicycle helmets and state laws, visit the Bicycle Helmet Safety Institute website at http://www.helmets.org/index.htm.


WATCH This!
ARE YOU
The Thrill Seeker?
IDENTIFY THE HAZARDS AND DETERMINE IF YOU OR YOUR FRIENDS ARE AT RISK
BOSS
SAFETY FACTOR
Check out your local Better Opportunities for Single Soldiers meeting to learn how you can see the BOSS Safety Factor

Gear Up and

The door swings open and you strut through in your black leather jacket, chaps and boots. Everyone in the place turns and stares while you do your best "Rebel Without a Cause" imitation. There is clearly no better reason to wear motorcycle gear. Well, maybe there is — safety.

The personal protective equipment (PPE) we wear while riding is the only thing between us and the road. Depending on the situation, wearing the proper protective gear (heavy jacket, gloves, boots, etc.) could reduce potential injuries significantly — 30 to 80 percent or more in most cases. Also, wearing PPE isn't just smart, it's mandatory for all U.S. Army Soldiers, according to Army Regulation 385-10 as well as Department of Defense Instruction 6055.04.

Motorcycle Helmets

According to the National Highway Traffic Safety Administration (NHTSA), motorcyclists without helmets are 29 percent less likely to survive a crash and 40 percent more likely to die from a head injury than those wearing a Department of Transportation-approved helmet. Motorcyclists without helmets are also three times more likely to suffer brain injuries in crashes than those using helmets. Admit it, you like your brain. So protect your head and always wear a helmet.

Eyewear

Protective eyewear (or a face shield attached to the helmet) should be worn at all times, even if the motorcycle is equipped with a windshield. Anti-fog ballistic lenses are recommended when choosing eyewear. You will also want to keep a pair of clear lenses on hand for riding after the sun goes down.

Jacket

Most high-quality motorcycle jackets are made from cordura, leather, ballistic nylon or Kevlar. A good jacket will include heavy padding on the elbows, spine and shoulders. Additionally, the

Ride

MASTER SGT. WILLIAM RAYNER
Arkansas National Guard State Safety Office
Camp Robinson, Ark.

DID YOU KNOW?

Service members who successfully complete their locally required motorcycle safety riding course are eligible for a one-time, 20 percent discount off one item of personal protective equipment (PPE) at the Exchange. The Exchange sells numerous items of PPE, including helmets, protective eyewear, riding jackets and gloves, in facilities worldwide. Even better, these items are also free of sales tax. For more information, contact your local Exchange.

jacket should include reflective strips. If not, you should augment the jacket by wearing a highly visible reflective vest over it. Also, look for a jacket that offers good venting for summertime riding.

Pants

Many riders wear jeans or other types of long trousers, but like a jacket, good pants will be made of leather, nylon or Kevlar. There are also various brands of heavy denim pants made specifically for riding. For winter riding, pants not only offer protection, they can keep you warm. Insulated pants or chaps are a good choice and can be bought coated for rain resistance.

DID YOU KNOW?

May 2011 has been designated as Motorcycle Safety Awareness Month. The National Highway Traffic Safety Administration encourages drivers to become more aware of motorcycles on the road, especially during the warmer, busier summer riding months.

Gloves

Full-fingered gloves should be worn regardless of the weather, and there are different types for warm and cold weather riding. Warm weather gloves are usually not insulated and are made of leather or Kevlar. The good ones have carbon fiber knuckle protection should you fall. Winter gloves provide the same level of protection, but are insulated. Waterproofing is also a good idea.

FYI

Additional information regarding proper Motorcycle PPE can be found in Army Regulation 385-10, Chapter 11-9.

Boots

A motorcyclist should have boots that allow the foot to fit on the motorcycle peg while still providing good ankle support. Boots should come up over the ankle, as that will offer additional protection in the event of a crash. Leather is a great choice for a boot and provides greater protection than other "stylish" footwear. Make sure the boot has a good, durable rubber sole that provides traction and slip resistance. The thicker the sole, the more the boot will absorb the bike's vibration.

Riders are often the victims of unpredictable and irresponsible motorists (see the story "From Out of Nowhere", on page 12 of this issue). When you cannot avoid an accident, your riding gear may be all that stands between you and a funeral with honors. Why not put that funeral off until your great-grandchildren are old enough to attend?«

RIDE FOR YOUR LIFE

The Motorcycle Mentorship Program establishes voluntary installation-level motorcycle associations where less experienced riders and seasoned riders can create a supportive environment of responsible motorcycle riding and enjoyment. This can create positive conduct and behavior and serve as a force multiplier that supports a commander's motorcycle accident prevention program.

MMP
MOTORCYCLE MENTORSHIP PROGRAM

Check out the USACR/Safety Center MMP website for some examples of active mentoring programs.

https://safety.army.mil/mmp/

RUSH TO FAILURE

**CHIEF WARRANT OFFICER 2 JASON HUBBARD AND
CHIEF WARRANT OFFICER 3 JEREMY MILLER**
2nd Squadron, 17th Cavalry Regiment
101st Airborne Division (Task Force Saber)
Fort Campbell, Ky.

How dangerous can "light and variable" winds be to the crew of an OH-58D rushing to complete a mission? Read this first-hand account of a crew who, fortunately, survived a close brush with death.

On the night of June 19, 2010, our mission was to conduct area security for a deliberate operation. The squadron commander signed off as the final approval authority. Weather for the evening was perfect. The skies were clear, visibility was unrestricted and winds were light and variable for our night vision goggle flight. We never knew this would play a significant part in our evening.

We did our usual pre-mission planning. We received the mission, gathered the necessary equipment, checked our weight and balance, conducted appropriate hover power and power performance checks, preflighted the aircraft and conducted our crew brief. Everything seemed normal. It was just another routine mission like we had done a thousand times before.

We departed the airfield as a flight of two OH-58Ds and flew to an outlying forward operating base (FOB) in support of ground forces in southern Afghanistan. After the support effort was complete, we conducted forward arming and refueling point operations at another nearby FOB.

Following refuel, we were instructed to position our aircraft at idle in the FOB landing zone (LZ). We were to stay there until called forward to provide security for the ground forces on the objective.

When we arrived at the FOB, the winds were light, just as advertised. The windsock was limp, so Chalk 1 announced he would land to the north. We were Chalk 2 and acknowledged lead's call and followed him into the LZ. Both aircraft landed and maneuvered around the small parking area without incident.

Chalk 1 departed to the south due to light winds and the tight configuration of other aircraft in the LZ. We acknowledged and again maneuvered to depart to the south. Both aircraft took off and we proceeded to the objective area to conduct our mission.

We had been on the objective area for about two hours when it was time to refuel again. Chalk 1 told the ground force commander we were departing the area for fuel and would maintain radio communication if anything came up. Both aircraft left the area and returned to the same FOB as before to refuel.

When we arrived at the FOB, we discovered two additional aircraft on the LZ. A pair of Chinooks had parked on the east side of the LZ and shut down, awaiting a mission. Chalk 1

announced they would be landing to the north as before because the winds were still light. Once again, we followed them into the LZ and refueled.

Since we were not needed right away at the objective area, after refueling, we repositioned the aircraft to the parking area. Due to the limited space available in the LZ, Chalk 1 had to park on the west side while we parked on the east side. After landing, we rolled the throttle down to idle to conserve fuel. We waited for about 10 minutes and then the ground force commander called and said he wanted us back on station. We rolled the throttle back to 100 percent and got ready to depart.

Chalk 1 announced he was departing to the south, as before, and we acknowledged. We then announced we were ready to depart. Chalk 1 picked up and turned to the south. We, in turn, picked up and turned to the south to follow lead. Due to the location of the Chinooks and the fueling points, we had to follow directly behind lead to depart. What we didn't think of was Chalk 1's rotor wash.

As we departed the FOB en route to the ground forces, we were still in trail position and slightly below Chalk 1's flight path. We started building airspeed and felt the aircraft shudder as we started to go through effective translational lift. That's when the rotor system operates more efficiently because it is operating in clean air. Just as the aircraft began to shudder, we entered Chalk 1's rotor wash, which buffeted our aircraft, and we began to descend. Chief Warrant Officer 3 Miller was the pilot in command and pulled collective to arrest our descent. Because we lacked sufficient power, we continued to descend and Miller announced we were going to land. However, because of obstacles on the south end of the landing zone, we had to extend our landing to an unimproved area.

As we transitioned from takeoff profile to landing, our rotor wash caused a dust cloud so thick we lost sight of all ground references (brownout). I pulled collective to attempt an instrument takeoff; however, we did not have enough power to climb. Unable to see the ground to land and unable to climb, all we could do was hope for the best. Caught in the brownout, we drifted to the right and struck a military-owned demountable container.

The Kiowa flipped and came to rest on its left side, catching fire. I was the co-pilot on this flight, and both Miller and I were conscious and attempted to assist each other in getting out of the aircraft. We were hanging from our seat

> “In **HINDSIGHT**, you **NEVER** want to **RUSH** to the **POINT** that you **NEGLECT** safety.”

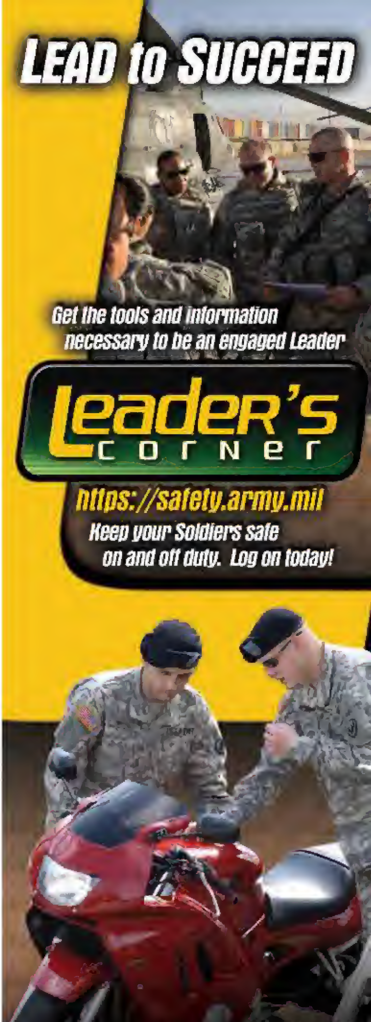
belts, which neither of us could unlatch. I was able to lift my weight by pressing with my feet and pushing with my left arm to release my seat belt. I kicked out the windscreen and climbed halfway out, and then one of the Chinook crew chiefs pulled me clear. Miller's seat belt had to be cut for him to get out of the aircraft. While I escaped without any injuries, Miller suffered a broken nose.

Lessons Learned

In hindsight, you never want to rush to the point that you neglect safety. We all want to get to the ground forces as quickly as possible. However, if you crash, you won't be helping anyone and may jeopardize the entire ground mission. With the light winds, we should have given Chalk 1 a little more space to take off. We should have ensured Chalk 1's rotor downwash had dispersed. If we'd waited a few seconds longer, we would've missed the rotor wash and this accident wouldn't have occurred.

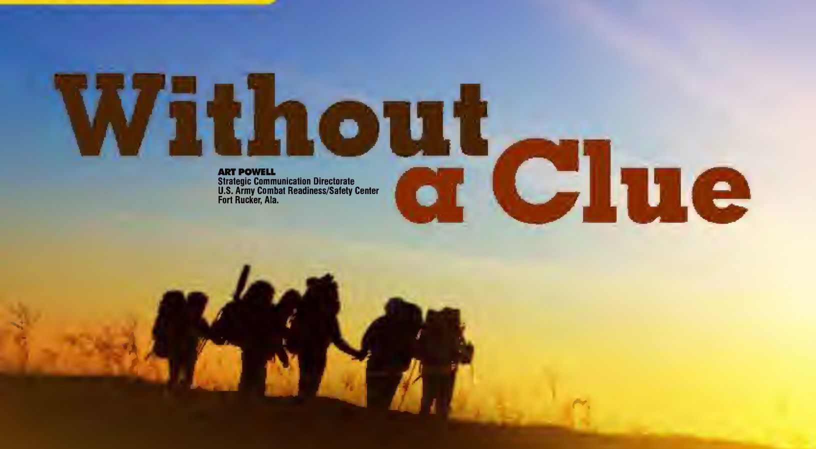
If you get into a similar situation, it's best to either commit to the takeoff or land immediately. Take the extra 10 or 15 seconds to get out of the LZ. There is no reason to fly tight in Afghanistan with the limited power margins available.

One more thing, you should always have a plan for getting out of an inverted aircraft. We often assume that the aircraft will end up upright on level ground. Put your equipment on your vest so that you can access it while your seat belt is on. While upside down, seat belts won't release like when you're sitting upright, so have your seat cutter where you can get to it and tie it down. Think about every contingency and have a plan.«


LEAD to SUCCEED
Get the tools and information necessary to be an engaged Leader
Leader's Corner
https://safety.army.mil
Keep your Soldiers safe on and off duty. Log on today!

Without a Clue

ART POWELL
Strategic Communication Directorate
U.S. Army Combat Readiness/Safety Center
Fort Rucker, Ala.



Admit it, you're lost. That's right, you, the tough Soldier who never thought this would happen in a million years, are lost in the great outdoors. If this happened while on duty, you'd be with other Soldiers and have radios. But now, you're alone in the deep, dark woods, your cell phone is useless and you realize you're in a tough situation.

Warmer weather is when many folks head outdoors to enjoy family and friends, thaw out from the winter and put cabin fever in the rearview mirror. The last thing you want to do is end up in the news as the "lost hiker." One thing is for sure — your buddies won't let you forget it when it's all over. However, you can deal with them later. For now, you need to focus on what to do.

After admitting you're lost, what's the first thing you should do? You need to stay where you are — unless it's a short distance to find shelter. Park rangers say that since your last known or reported position is where they first look for you, you might be home for supper if you just stay put. If you continue moving because you're "sure" you can walk out of this situation, you'll probably make it tougher for searchers to locate you. Hiking requires planning, just like any other activity involving risk. Don't think "they'll come get me if I get lost" is a plan.

The website for the Great Smoky Mountains National Park, located along the Tennessee-North Carolina border, makes it clear you'd better do your homework before your feet hit the trail. It states, "You are responsible for your own safety! Travel in Great Smoky Mountains backcountry areas has inherent risks and hikers assume complete responsibility for their own safety. Rescue is not a certainty!"

The Great Smokies is the most visited national park in the nation, with 8-10 million guests a year. While most who decide to sample the park's 800 miles of trails do so without incident, others get lost. Over the history of the park, a few have gone missing and were never seen again.

Your safety is your responsibility and depends on your own good judgment, adequate preparation and constant attention. Backcountry hikers should be in good physical condition and able to survive on their own. Proper equipment and knowing how to use it are essential for a safe trip. Here are a few basics to help you get started:

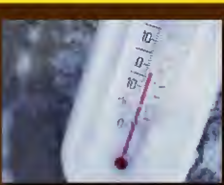
- Let a responsible person know your route and return time.
- Always hike with another person. Keep your hiking party together and stay on officially maintained trails. Always keep children in your sight when hiking — do not allow them to get ahead of you or fall behind.
- Carry a current park trail map and know how to read it. A handheld GPS or compass can also be useful, but make sure you know how to use one properly. Practice before your hike.
- Carry two small flashlights or headlamps — even on a day hike. If you have trouble on the trail, darkness may fall before you can finish your hike.
- Take a minimum of two quarts of water per person per day. All water obtained from the backcountry should be treated either by filtering or boiling.
- Bring some jerky or trail mix to snack on if you do become lost. It will give you some energy to fight off the cold weather.
- Carry a small first aid kit designed for hikers and campers. Make sure you include medications for those with medical conditions.
- Check the current weather forecast and be prepared for quickly changing conditions.
- Wear shoes or boots that provide good ankle support.
- Avoid hypothermia, the dangerous lowering of body temperature, by keeping dry.
- Avoid cotton clothing. Dress in layers that can be easily removed or added as you heat up or cool down. Always carry a wind-resistant jacket and rain gear — even on sunny days.
- Don't attempt to cross rain-swollen streams; they will recede rapidly after precipitation stops and waiting may save your life. When crossing any stream more than ankle-deep, unbuckle the waist strap of your pack, wear shoes and use a staff to steady yourself.
- Familiarize yourself with the local wildlife and know how to avoid confrontations with it.

Sure, you may be in good physical shape. But if you live at or near sea-level, you may not realize how thin the air is at, say, 7,000 feet, advises Al Nash from Yellowstone National Park. People unaccustomed to the rarified air at higher altitudes are vulnerable to dehydration and suffering the effects of overexertion. If you become "disoriented," Nash recommends staying put and sounding, on a regular basis, that emergency whistle you brought with you. (You did bring one, didn't you?) A signal mirror can also be a life saver by allowing you to alert aircrews to your location.

The difference between being home for supper and sitting in the dark, shivering under a tall tree in the forest, could be up to how well you planned for your hiking trip. Remember, your safety in the great outdoors is your responsibility.«

DID YOU KNOW?

In 1995, four students in the Army's Ranger School died of hypothermia while training at Eglin Air Force Base, Fla., after being submerged in 52 F water for 11 hours. While this is an extreme example, it demonstrates that hypothermia is deadly at temperatures far above the freezing level.



On a Wing and a Spare

MASTER SGT. PAUL B. CALIHAN
1/285 Attack Reconnaissance Battalion
Silver Bell Army Heliport
Marana, Ariz.

We'd planned our vacation perfectly. We would travel to Los Angeles for a couple of days, spending the first day at Disneyland and the second at Knott's Berry Farm. The following day we would drive to San Diego to go whale watching and visit Sea World. We were looking forward to a great vacation and planned for all of our hotels and rest stops along the way.

We decided we'd drive our small recreational vehicle (RV), which had just gotten out of the repair shop. I'd asked the mechanics to make sure it was in good shape for the trip from Arizona to California. The first day went off without a hitch and we arrived on California's busy highways right on schedule.

As we approached our exit from the interstate, I heard a loud pop. I pulled over onto the shoulder and looked at the tires — but they all looked intact. I couldn't figure out what had happened. Since our exit was only a half mile away, I drove on to our hotel. When we got there, I noticed one of the rear tires was completely flat. Unfortunately, I hadn't checked

the spare or the jack before leaving on the trip. I'd assumed both were in good shape and properly secured on the RV.

The jack seemed to be OK; however, I wasn't properly dressed for changing a tire in a hotel parking lot. Instead, I decided to call for roadside assistance. I hadn't reviewed my insurance policy for at least six months because I only rarely drove the RV. I'd just assumed free roadside assistance was included, even though it wasn't clearly stated on my insurance card. When I called an insurance agent, I found out I'd overlooked adding free roadside assistance to my policy. He said they'd send a truck within the hour for $100 — an expensive oversight on my part.

When the truck arrived, the repairman removed the blown tire, which was completely shredded. When he pulled out the spare, it turned out to be flat and dry rotted. I've dealt with tires like this before and thought that it would be an easy fix to drop it off at a tire repair shop and pick it up the next day. After all, we were only driving five miles to Disneyland. I dropped off the tire at a nearby tire shop, expecting to pick it up the next day before we left for San Diego.

As the day rolled on, I didn't get the "magic" phone call telling me the tire was ready. Finally, the shop called at the end of the day to tell me they didn't have the tire in stock and it had been discontinued. That was not the news I was expecting.

We looked on the Internet and had a tough time finding tires for RVs, especially our model. Here we were 400 miles from home with a dry-rotted tire. We weighed our options. That night, I called and signed up for my insurance company's free roadside assistance coverage (another $100 to our policy). Beyond that, our options weren't too pretty — find a new tire, drive on the dry-rotted spare until our luck ran out or go home.

We made some long-distance calls to tire shops in San Diego and found one that had a tire in stock that would fit our RV. With no other choice, we decided to risk driving the 100 or so miles to San Diego on our dry-rotted tire. Luckily, it

was raining during our drive, which helped keep traffic slow.

We drove straight to the tire shop in San Diego, had the new tire mounted and then finished our vacation. However, in the process, I learned some lessons I would not take lightly.

I learned you should always review your insurance policy so you know what is included in your coverage. Also, just because you've had your vehicle serviced, don't assume that common maintenance, such as checking the air pressure in the spare tire, has been done. Before heading out, check the air pressure in all of your tires and look for signs of dry rot. "Assuming" everything is all right

RV TRIP TIPS

Traveling safely is important to everyone who takes to the road with a recreational vehicle (RV). Before you set out on your next trip, take a few minutes to review these tips for a safe, trouble-free journey.

Before Your Trip

Make sure your RV is well maintained and ready to go when you are.

- Install a deadbolt door lock on your RV.
- Inspect all belts and hoses for cracking, especially radiator hoses. Replace as needed.
- Check headlights, tires (air and tread) and turn signals.
- Check any hitch or towing equipment.
- Verify your insurance coverage.
- Check your fire extinguisher and smoke alarms.
- Clean your cooking vent hood to avoid grease fires.
- Leave your itinerary with relatives or friends in case of emergency.

On the Road

Be sure to observe the common — but often overlooked — principles of safety. Obey the speed limit, know your rig height and buckle your seat belt.

Tools to Keep Handy

- Flashlight
- Jumper cables
- Aerosol tire sealant and inflation product. *(Editor's note: Use only as a temporary measure to reach a service facility where the tire can be properly repaired.)*
- Emergency road flares
- Adjustable wrench
- Screwdrivers
- Pliers
- Duct tape (for temporary repairs to ruptured radiator hoses)

Severe Weather Tips

Park your RV in a sheltered area. In stormy weather, avoid trees or power lines that could fall on your can leave you vulnerable to a nasty surprise. I will be better prepared for future vacations by making sure I include emergency placards, flares, a good jack, an air compressor and have roadside assistance on my insurance. This will be the last vacation where we have to squeak by on a wing and spare! «

vehicle. The safest place during lightning is inside your RV. If you're in the path of a tornado, you're safest choice is to go to a tornado shelter. As an alternative, you can park under a bridge overpass or in a ditch. Avoid parking in low areas that are prone to flash flooding.

Carry Your Insurance Information

Make sure to carry all insurance contact information with you, including a toll-free claim service number if available. If you are injured in an accident, seek medical assistance first and then contact your insurance company or have someone else make the call for you. «

For more information on RV and camping safety, visit the Funroads.com website at http://www.funroads.com/rv-travel/safety/checklist/.

Editor's note: Information provided by the Foremost Insurance Group of Companies.

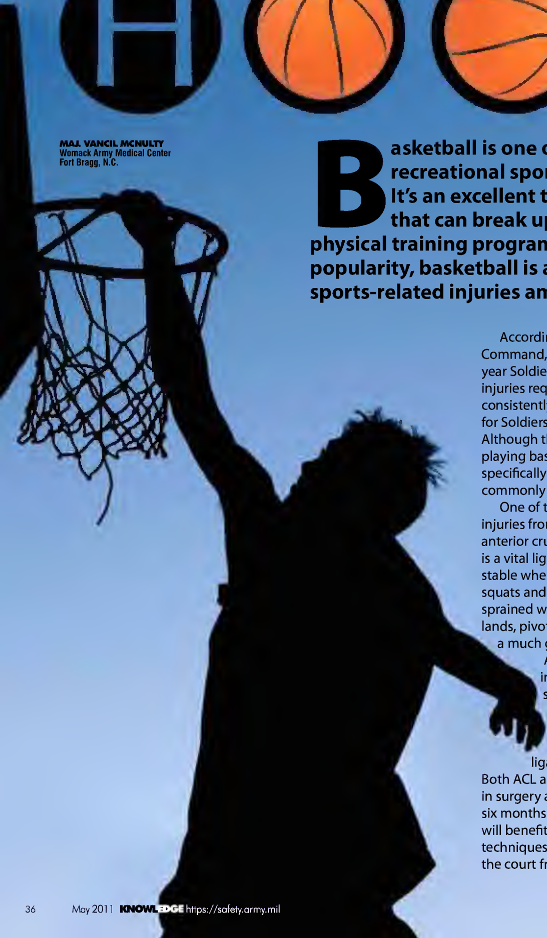
TRAVEL RISK TRiPS PLANNING SYSTEM

Have you heard about the new feature on TRiPS?

TRiPS now provides users with a more detailed motorcycle assessment, allowing them to better capture their riding experience.

HOOP

MAJ. VANCIL MCNULTY
Womack Army Medical Center
Fort Bragg, N.C.



Basketball is one of the most popular recreational sports in the armed forces. It's an excellent tool for fitness and fun that can break up the monotony of a physical training program. Probably due to its popularity, basketball is also a leading cause of sports-related injuries among service members.

According to the U.S. Army Public Health Command, Army survey data show that each year Soldiers suffer more than 50,000 sports injuries requiring medical care. Basketball is consistently a leading injury-producing sport for Soldiers both deployed and at home station. Although they can suffer a variety of injuries playing basketball, the lower extremities — specifically the knee and ankle — are the most commonly affected areas.

One of the more serious, yet common, injuries from basketball is a tear of the anterior cruciate ligament (ACL). The ACL is a vital ligament that helps keep the knee stable when a person bends at the knee, squats and jumps. The ACL can be torn or sprained when the player twists, jumps, lands, pivots or suddenly stops. Females have a much greater risk of tearing an ACL.

Another very common site of injury is the ankle. Ankle ligament sprains and tears usually occur when the foot is "rolled" or twisted inward after an awkward landing, pivot or cut. It's usually the outer ligaments of the ankle that get injured. Both ACL and ankle ligament tears can result in surgery and rehabilitation that can last six months to a year. Recreational athletes will benefit from practicing some simple techniques that may prevent a good time on the court from becoming a major injury.

S Health

Warm-up

The warm-up cannot be overemphasized for any sport and becomes more important if one rarely plays basketball. The warm-up involves practicing the specific movements required in basketball — but at a much slower and controlled pace. Take 10 to 15 minutes to practice techniques such as jumping, landing, cutting, pivoting and handling the ball. These activities prime the muscles and nervous system to keep movements precise and controlled, which will protect ligaments, tendons and joints. Stretching is not the same as a warm-up, but it can be a part of the warm-up.

Know Your Limits

Don't try and play above your skill level. Overconfidence in one's athletic abilities has been the downfall of many recreational basketball players. Don't get sloppy with technique or overexuberant with movements that you may not be accustomed to doing. The "I-used-to-be-able-to-dunk" syndrome is one example. Also, be aware of the skill level of your opponent, who may be much better (or worse) than you.

Wear Ankle Braces

Those with prior ankle sprains are especially vulnerable to a re-injury and should consider wearing an ankle brace while playing basketball. It is unknown how much preventive value an ankle brace provides an athlete that has never sprained their ankle. However, it may be beneficial for those who are inexperienced or underconfident in their basketball movement skills. A high-quality ankle brace can usually be attained from sick-call or a medical treatment facility physical therapy clinic at no charge. Unfortunately, knee braces do not have much preventive value for basketball-related knee injuries.

Conclusion

In addition to its physical fitness benefits, basketball can be a source of stress relief for many Soldiers. But it can also lead to injuries that result in significant lost duty time and a decrease in readiness. Before participating in a pick-up game of basketball, or any other sport, make sure you're properly prepared so your hoop dreams don't turn into a nightmare.«

» FYI

Basketball injuries aren't limited to the knee and ankle. To better protect yourself on the court, consider the following:

- Wear appropriate basketball shoes.
- Remove rings and jewelry.
- Ensure the playing surface is clean and in good condition.
- Check the court and sidelines for tripping hazards such as gym bags and water bottles.
- Ensure the goal posts are padded and offset.
- Use mouth guards and eye protection (ASTM F803 standard).

FLY as a CREW

CHIEF WARRANT OFFICER 4 BRIAN ROBINSON
Detachment 33, Operational Support Airlift Command
Buckley Air Force Base
Aurora, Colo.

Editor's note: Chief Warrant Officer 4 Brian Robinson and Chief Warrant Officer 3 Larry Ciancio of Colorado's Detachment 33, Operational Support Airlift Command, were conducting a functional check flight (FCF) July 14, 2010, in the unit's C-26E fixed-wing aircraft. After completion of the FCF and during the return to their home station, the aileron control cable snapped, causing an uncommanded roll to the left. A subsequent investigation revealed a misrouted aileron control cable had been sawing through a metal bulkhead for almost two years. Despite two previous maintenance inspections, the discrepancy wasn't discovered. Working together as a crew, Robinson and Ciancio were able to successfully land the aircraft. For their actions, they were recognized with the Broken Wing Award.

I planned to give Chief Warrant Officer 3 Larry Ciancio his annual instrument evaluation, but first we needed to sign off on an FCF for some previous maintenance. Our plan was to take off to the southeast, complete the FCF and return to Buckley Air Force Base. We would then pick up our instrument flight rules clearance to conduct the evaluation. The FCF required both engines be shut down one at a time and the propellers feathered to ensure proper operation.

We had great weather for the test flight and departed about 0900. Larry contacted Denver approach to coordinate a climb to 10,500 feet and obtained some maneuvering airspace to the southeast of Buckley. We arrived in the test flight area and commenced the checklist procedures. While I flew the airplane, Larry performed the engine shutdown, propeller feather and restart procedures. If there is such a thing as a routine FCF, this was it. The airplane was performing flawlessly. The engine shutdowns and restarts were uneventful, and with all the checks completed, it was time to return home.

Larry called Denver approach with our request and they subsequently cleared us to descend into the Class B airspace direct to Buckley. I began a left 30-degree bank descending turn toward

Buckley with the runway in sight. As I input right aileron to level the wings, something didn't feel right. There was some resistance just before the yoke snapped out of my hands with a loud crack and fell to an inverted position. I immediately retrieved my grip, only to discover the yoke was completely loose in the roll axis. I was dumbstruck as the aircraft began to steepen its bank angle to the left.

Larry sat straight up instantly, recognizing the seriousness of our predicament. He exclaimed with wide eyes, "Oh $#!%, Brian!" I experienced real fear and heartache that I would soon get to watch as we helplessly plummeted into the ground. Larry jumped on the controls, yet quickly realized his yoke could not stop the roll to the left either. At the same time Larry was testing his yoke, I was inputting right rudder, but it didn't seem to have any effect. We were in a slow roll going through 60 degrees of bank and would be upside down within seconds.

Larry transmitted "Mayday" to Denver approach control and informed them we had lost control of the aircraft.

They responded with, "Altitude at your discretion."

Before the airplane became inverted, I quickly pulled the right engine power lever to idle and pushed the left power lever all the way forward. Thankfully, the differential power stopped the roll and slowly began to level the aircraft. As we neared level flight, I reduced the left power as necessary to keep the aircraft flying level. For reasons I couldn't understand, the airplane required differential power to fly level. I thought

FYI

The Army Aviation Broken Wing Award recognizes aircrew members who demonstrate a high degree of professional skill while recovering an aircraft from an in-flight failure or malfunction requiring an emergency landing. Knowledge will periodically spotlight Soldiers who were recently presented with this award. Details on eligibility and nomination procedures of the award can be found in Department of Army Pamphlet 385-10, 6-3(f).

of Al Haines, the United Airlines captain who successfully crash-landed his crippled DC-10 without flight controls at Sioux City, Iowa. Although many survived in Sioux City, some lost their life. I feared our situation could be a recurrence of that crash.

Denver approach control was assisting us as much as possible and clearing the airspace around us. Straight ahead was Centennial Airport's runway 28, but it was only 4,800 feet long with the approach over a small hill. I found I could steer the airplane with differential power and decided to turn toward Buckley. Buckley's runway is 11,000 feet long and 200 feet wide with crash rescue services on the airfield. Denver approach control also gave us the option of Denver International's 16,000-foot runway, but I elected to head for our familiar home station.

Larry was controlling our altitude with his control yoke. As we lined up with Buckley's runway 32, he discovered he could control the roll of the airplane with the ailerons to the left. However, his yoke was still loose from the neutral position to the right. We began to experiment carefully what control authority we did have. I told Larry to keep the airplane level as I began to input right aileron trim. It became apparent that if we gave the airplane a right turning tendency with trim, Larry could keep the airplane level by using counter pressure with left aileron input. I slowly began to equal the power of the engines while I kept my right hand on the trim wheel to counteract any left bank excursions.

We decided on crew duties. Larry would fly the airplane while I controlled the engine power, communicated with air traffic control and guarded the trim in case we needed more. I loaded the instrument landing system data for runway 32 into our flight management system. At the glide slope intercept, I lowered the gear, set the flaps to one-half and completed the before-landing checklist. The configuration change was still manageable, but without the benefit of staying in a Holiday Inn Express the night before, we elected not to make any more changes. We prepared for a half-flap landing.

FOOD FOR THOUGHT

The Army Aircrew Coordination Training Enhanced (ACT-E) program provides a mechanism to effectively integrate, sustain and maintain crew coordination in the operations of aviation units. The need to evaluate aircrews consistently according to that training cannot be overstated. With greater than 25 percent of Army aviation accidents attributed to or involving crew coordination failures, aviation Leaders must continue to invest time in strategies that address improvements in crew coordination.

The approach was uneventful. Larry made one of the smoothest landings I've ever witnessed. I aggressively put the power levers into reverse and we quickly slowed to taxi speed. I terminated the emergency with the tower and Larry began the taxi to parking. The adrenaline and tension began to give way to the fear of what had just happened. We gave each other a high five, yet didn't really know what to say to each other. We completed the shutdown with the checklist as we had done countless times before.

Lessons Learned

We were very lucky this incident occurred on a bright, clear day with some altitude to work with. Had it occurred just minutes earlier with an engine shutdown, a successful outcome would have been unlikely.

When the cable broke, I was entirely dumbstruck. I never announced to Larry I had a problem, but with my yoke upside down, he figured it out. Had he not continued to experiment with his yoke, we may have just landed with differential power applied and the landing would have been more spectacular.

My shock at what happened delayed my taking immediate action. There is no emergency procedure published for such an event. When an incident occurs that you have never trained for, you can't give up. You must use all available knowledge and previous skills to find a solution. Thankfully, we did.

We never formally transferred the controls, but we did fly as a crew and figured out how to get our wounded bird home. It took two people to land the airplane successfully.«

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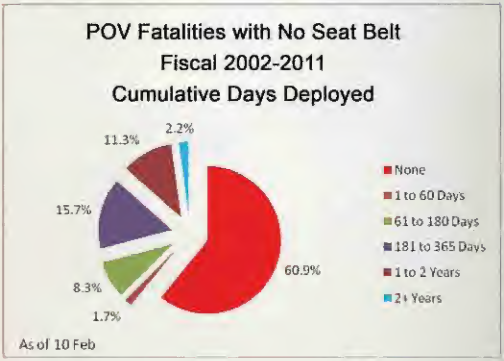
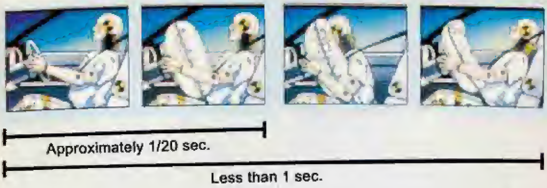
ARMY SAFE IS ARMY STRONG

Seat Belts *and* Stayin' Alive

STEVE KURTIAK AND TIM PAYNE
U.S. Army Combat Readiness/Safety Center
Fort Rucker, Ala.

As we all know, wearing a seat belt greatly increases your chances of surviving an accident — but only if you wear it. Based on the accident reports from Oct. 1, 2010, through Feb. 10, 2011, nine of 11 Soldiers involved in vehicle accidents chose not to comply with Army regulations and wear their seat belt. Of those nine Soldiers, eight — two of which were passengers — were ejected from their vehicles. In at least two of these accidents, other Soldiers who were wearing their seat belt survived.




Approximately 1/20 sec.
Less than 1 sec.

Conventional wisdom says that multiple deployments are a major cause of Soldier accidents, but the data show that is not the case. The typical Soldier killed in a vehicular accident is a 20- to 24-year-old single male specialist/corporal in their first enlistment with a high school diploma and who has not been deployed. In fact, more than 60 percent of the Soldiers killed in vehicle accidents since fiscal 2002 had never been deployed. Only 13.5 percent had more than 365 cumulative days deployed.

A seat belt is a component of the entire occupant protection system in vehicles. Federal Motor Vehicle Safety Standard 208, Occupant Crash Protection, as amended on July 17, 1984, required that automatic occupant protection, such as air bags or automatic belts, be phased into passenger cars during 1987-1990. Air bags are now standard equipment on vehicles and have been since September 1997 for passenger cars and 1998 for light trucks. The air bag sensor, a component of the air bag system, sends a signal to deploy the air bags in collisions between 8 and 14 mph. The graphic above shows how quickly the air bag deploys.

Many vehicles produced today also have side air bags, and some include air bags installed in the roof support pillars. Remember, though, that the air bag system is designed to supplement the vehicle's seat belts, not be the primary protection. Vehicle manufacturers have also designed crumple zones to absorb the energy of a collision and dissipate that energy to reduce the forces on the occupants. Manufacturer technology has progressed to the point where a vehicle will shut off the fuel, unlock the doors and turn on the emergency flashers in the event of a crash.

With all of these great safety features, why would anyone choose not to use the most effective component of the occupant protection system? Is it a "Nothing will happen to me," attitude or a "Who are they to tell me what to do," approach to driving or riding in a vehicle? Regardless the attitude or reason, nine Soldiers made a conscious decision not to wear a seat belt and paid for that decision with their lives.«

LOST

AVIATION

AH-64D

CLASS C

- The crew experienced a No.1 engine failure while on a crosswind pattern, and the No. 2 engine failed on downwind. The crew executed an autorotation, and the aircraft sustained damage on landing.

CH-47D

CLASS C

- The aircraft's right-aft landing gear was damaged when it struck the edge of a berm in dust conditions. The aircraft instrumentation alerted the crew and they landed without further incident.

- The aircraft's front-left landing gear was damaged during landing in brownout conditions. The aircraft landed without further incident.

- The aircraft touched down hard during a roll-on dust landing, damaging the left-forward rim assembly and dislodging the tire. The crew initiated a go-around to avoid a ground obstacle, during which the flight engineer suffered a leg injury. The aircraft landed in a notable left-low attitude at the nearest Army airfield.

- The aircraft's landing gear collapsed during a pinnacle landing. The aircraft was approved for a one-time flight to home station for repair.

UH-60A

CLASS C

- The crew was ground taxiing to parking when the main rotor system struck a single main rotor blade of a parked aircraft.

UH-72A

CLASS C

- The aircraft experienced NR (main rotor speed) overspeed (117 percent for two seconds) during an autorotation. The aircraft landed without further incident. A post-flight inspection revealed damage to the main rotor head.

UAS

RQ-7B

CLASS B

- After launching, the crew experienced a generator failure. The chute did not deploy and the unmanned aircraft (UA) crashed north of the airfield. The aircraft was deemed a total loss.

CLASS C

- The UA experienced an overtemp condition during a climb. The crew executed control flight and the chute was deployed. The UA was damaged upon landing and recovered.

LOSSES AVIATION

FISCAL 2011 Class A/Fatalities thru March 2011

ATTACK	0/0
RECON	1/0
UTILITY	2/4
CARGO	1/0
TRAINING	0/0
FIXED-WING	0/0
UAS	5/0
TOTAL	9/4

as of April 6, 2011

GROUND

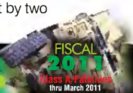
Personnel Injury

CLASS A

- A Soldier was running on an installation trail when he was shot and killed by a hunter.

CLASS B

- A Soldier suffered a likely permanent partial disability injury when his M249 discharged as he was dismounting a combat vehicle. The Soldier was struck in the leg and foot by two rounds. Another

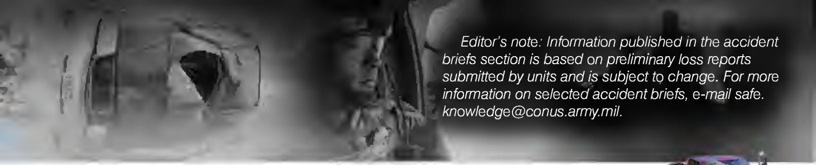


LOSSES GROUND

FISCAL 2011 Class A/Fatalities thru March 2011

AMV	2/0
ACV	3/2
PERSONNEL INJURY includes weapons-handling accidents	16/15
FIRE/ EXPLOSIVE	1/1
PROPERTY DAMAGE	2/0
TOTAL	24/18

as of April 6, 2011



Editor's note: Information published in the accident briefs section is based on preliminary loss reports submitted by units and is subject to change. For more information on selected accident briefs, e-mail safe.knowledge@conus.army.mil.

Soldier was also injured in the incident.

- A Soldier lost a portion of her finger when her gloved hand was caught in the fold of a HEMTT ladder as she was descending following routine gauge checks.

DRIVING

POV

CLASS A

- A Soldier was killed when he was ejected from a vehicle that struck a culvert. The Soldier had been drinking and was not wearing his seat belt. The Soldier driving the vehicle, who had also been drinking, wore a seat belt and survived.
- A Soldier died when he was ejected from his vehicle that left the roadway and struck a tree. The Soldier was not wearing a seat belt.

POM

CLASS A

- A Soldier died after she lost control of her motorcycle, fell onto the road and was struck by another rider following her. The Soldier had been properly trained, licensed and was wearing her personal protective equipment.

LOSSES POV/POM

FISCAL 2011
Class A/Fatalities thru March 2011

CAR	18/17
SUV/JEEP	6/5
TRUCK	3/3
MOTORCYCLE	17/15
PEDESTRIAN	2/2
OTHER*	2/2
TOTAL	48/44

*Includes vans, ATVs, snowmobiles and bicycles

as of April 6, 2011

Fiscal Year 2010: 45

Three Year Average: 53

IS THE SAFETY ON?
The Range & Weapons Safety Toolbox contains information, tools and links related to the safe handling of military and privately owned weapons
RANGE & WEAPONS SAFETY TOOLBOX
https://safety.army.mil/rangeweaponssafety

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